

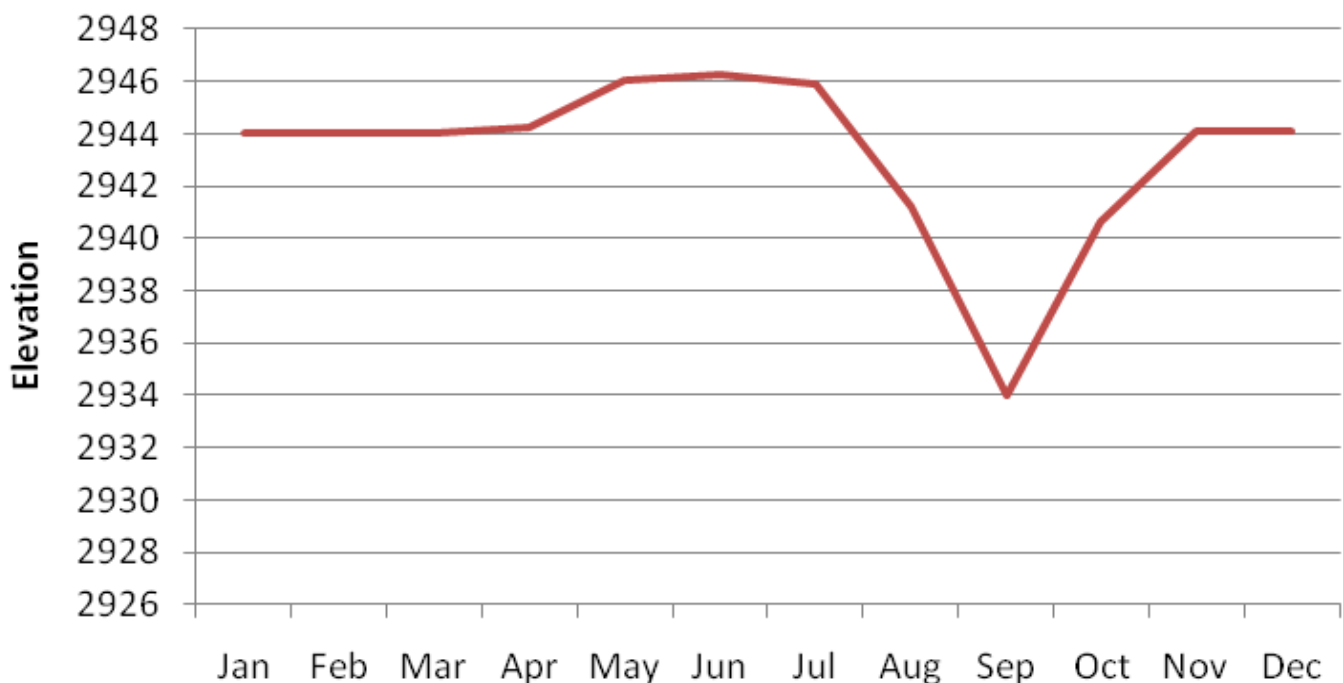
Merritt Reservoir 2010 Fall Survey Summary

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Merritt Reservoir is located in the Nebraska sandhills approximately 26 miles south-west of Valentine, NE. The area is comprised of 2905 acres of water with 6000 acres of land adjacent to the reservoir. The reservoir was built in 1964 by the Bureau of Reclamation for irrigation purposes. When built, the Snake River was dammed near its confluence with Boardman Creek, flooding both valleys along with the Powder Horn arm of the reservoir. Flows from both the Boardman Creek and Snake River contribute to filling the reservoir to full pool each year. A graph showing fluctuations in lake levels over the last year can be seen below. The water and land adjacent to the reservoir is managed by the Nebraska Game and Parks Commission for fishing, hunting, and recreational activities. Fishing is available year round and several different fish species exist in Merritt Reservoir which include: walleye, white bass, muskellunge, northern pike, yellow perch, bluegill, black crappie, largemouth bass, freshwater drum, and common carp. Facilities at Merritt Reservoir include eight campgrounds (one with electrical hookups and ADA accessible shower), one dump station, vault toilets, picnic shelters, two fish cleaning stations, five boat ramps with lighted parking lots, and an area concession which provides permits, groceries, fee camping with RV hookups, boat rentals, fuel, and guide services.

Merritt Reservoir Monthly Elevation 2010



The following text and graphs are the result of gill netting surveys and electrofishing surveys completed during the spring and fall of 2010 at Merritt Reservoir. For comparative purposes it also shows the results from previous years. Gill nets are used to sample fish species that are primarily found in open water such as walleye and white bass. Electrofishing surveys will be done every other year to sample species such as largemouth and smallmouth bass. The nets and electrofishing stations are sampled each year at approximately the same locations and dates as previous years to allow for trend comparisons.

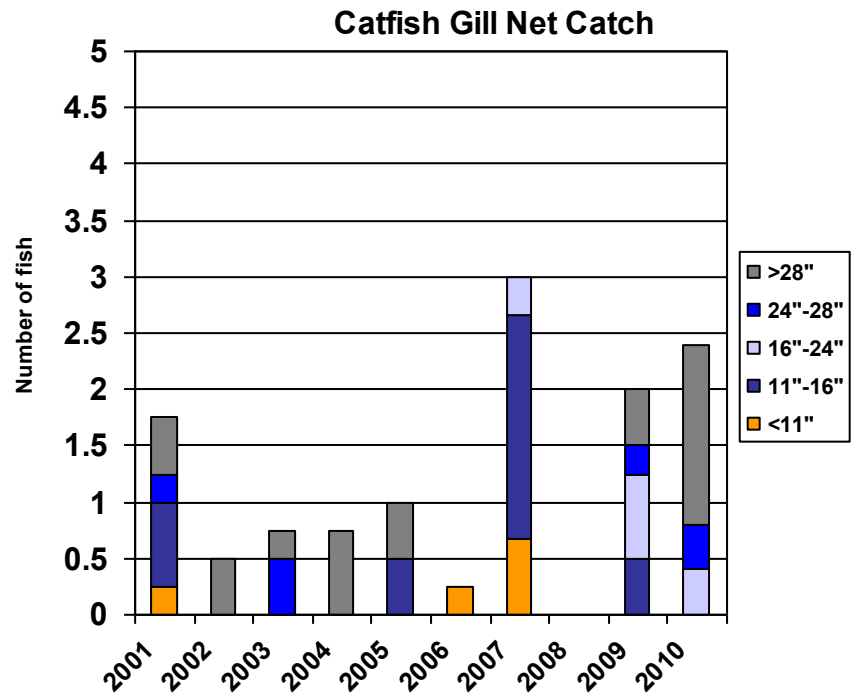
Channel Catfish

Merritt Reservoir has always been one of the top places for anglers to fish searching for trophy catfish and as shown in the graph has some very big catfish. Merritt holds the Nebraska state record channel catfish which was caught in 1986 and weighed 41.5 pounds.

Net catches are typically low in Merritt and have averaged a little over 1 fish per net since 2001. The gill net catch in 2010 was 2.8 fish per net however, over 50% of those fish were over 28 inches in length.

Statewide regulations allow anglers to have 5 fish in their daily bag. The population is maintained through an annual stocking of 14,250 (9 inch) channel catfish in September.

Although numbers seem to be low, channel catfish anglers should have similar success as last year with opportunities at fish greater than 28 inches. For more information on fishing for channel catfish be sure to check out the creel summary from this past year at Merritt Reservoir.

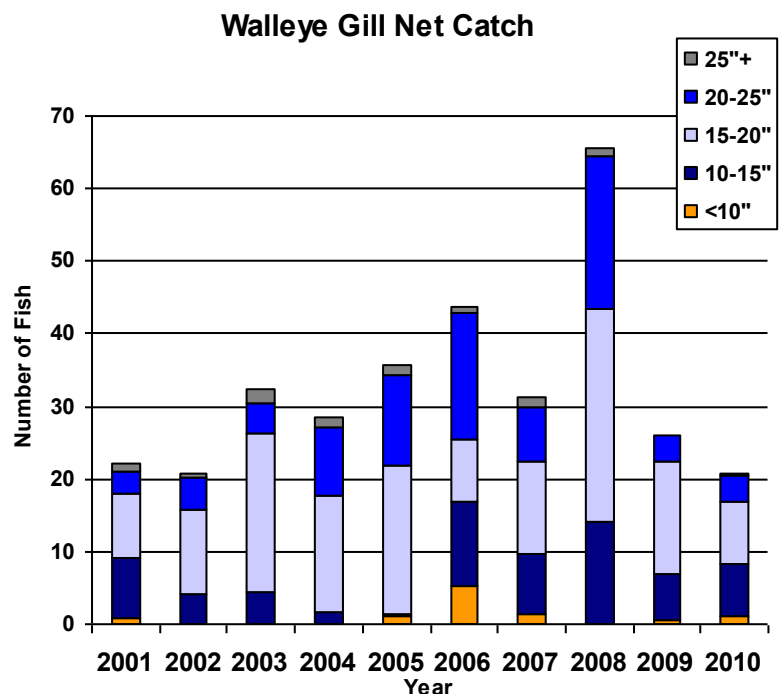


Walleye

The walleye gill net catch in 2010 was 20.8 fish per net and on a downward trend since 2008. This also fell below the 32.6 fish per net average since 2001. However, of the fish sampled in 2010, 60% of them were above the statewide minimum length limit of 15 inches and approximately 20% of those fish were greater than 20 inches. Ten different year classes were sampled and the average size of walleye collected was 16 inches. Merritt Reservoir is stocked annually with 142,250 fingerling walleye (2 inches) in June to maintain the population. This is a stocking rate of 50 per acre.

Anglers at Merritt are allowed a daily bag limit of four walleye which may include one from 15 to 18 inches and three over 18 inches (it is allowable to have all fish over 18 inches) but no more than one fish over 22 inches in length is allowed in the daily bag.

Even though walleye numbers are relatively lower, Merritt should still provide some opportunities for 15 to 20 inch walleye. Larger fish numbers are also lower than we have seen in the last ten years but these fish are still present. For more information on walleye fishing be sure to check out the creel summary for Merritt Reservoir.



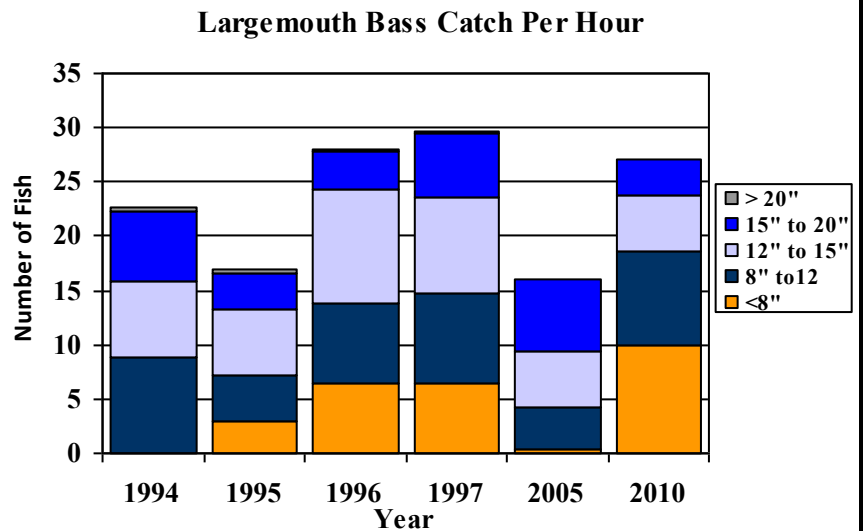
Largemouth Bass

The largemouth bass electrofishing catch per unit of effort for 2010 was approximately 27 fish sampled per hour. This was above the long term average for Merritt of 23.4 fish sampled per hour. As can be seen in the graph there is an excellent size structure of largemouth bass and approximately 12 percent of these fish are over the 15 inch statewide minimum length limit.

Anglers who target largemouth bass should have similar success to the last few years and strong year classes of smaller fish should contribute to the population in the future.

Smallmouth bass also allow for some limited fishing opportunities. In 2010, only 0.6 smallmouth bass were collected per hour of electrofishing and these fish were all under 7 inches in length. Efforts will be made to increase smallmouth bass numbers and size structure in the near future.

Statewide regulations for all black bass species in inland waters are a daily bag limit of 4 fish with a minimum length limit of 15 inches and only one fish per day larger than 21 inches may be harvested.



Other Species

Northern pike do exist in Merritt Reservoir even though numbers remained low. In 2010 northern pike populations were sampled and averaged approximately 1 fish per trap net. The average length of these fish was 28 inches with the largest fish collected being 39 inches. Northern pike regulations allow a daily bag limit of 4 fish.

Muskellunge also are present and Merritt is one of the top places for anglers to target a trophy. The state record muskellunge came from Merritt Reservoir in 1992 and weighed 41 pounds 8 ounces. Muskellunge are difficult to sample in our standard surveys but are generally collected during the spring walleye collections. In 2010 several muskellunge were collected and used to produce pure strain muskellunge and also to cross with northern pike for tiger muskellunge production needs. The largest fish collected in 2010 was 34 inches and weighed approximately 20 pounds. Muskellunge regulations allow a daily bag limit of 1 fish at least 40 inches long.

White bass numbers remain low in Merritt and no fish were sampled in the 2010 surveys. When white bass are collected or caught by anglers, these fish usually average between 14 and 16 inches. In 2010, 18,465 white bass fingerlings (2 inches) were stocked to supplement the population. Requests have been made for 120,000 fingerling white bass in 2011. These fish are stocked in an effort to provide a summer angling opportunity. Statewide regulations allow a daily bag limit of 15 fish and only one of those fish may be greater than 18 inches in length.

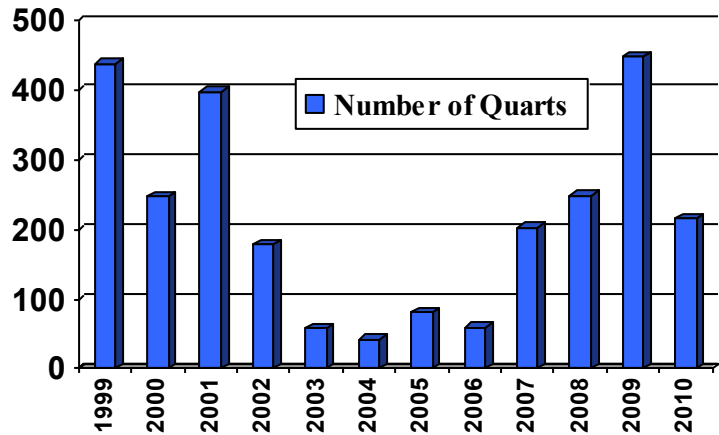
Black crappie, bluegill, and yellow perch provide additional angling opportunities at Merritt Reservoir. Black crappie are generally caught during the early spring spawning period or through the ice during the winter months. Bluegill and yellow perch can be caught year round and especially in the late summer months when other species may be challenging to find. Panfish regulations changed January 1, 2011 to a statewide daily bag limit of 15 fish (combination of all panfish species).

For more information on any of these species be sure to check out the creel summary from Merritt Reservoir for 2010.

Walleye Spawn

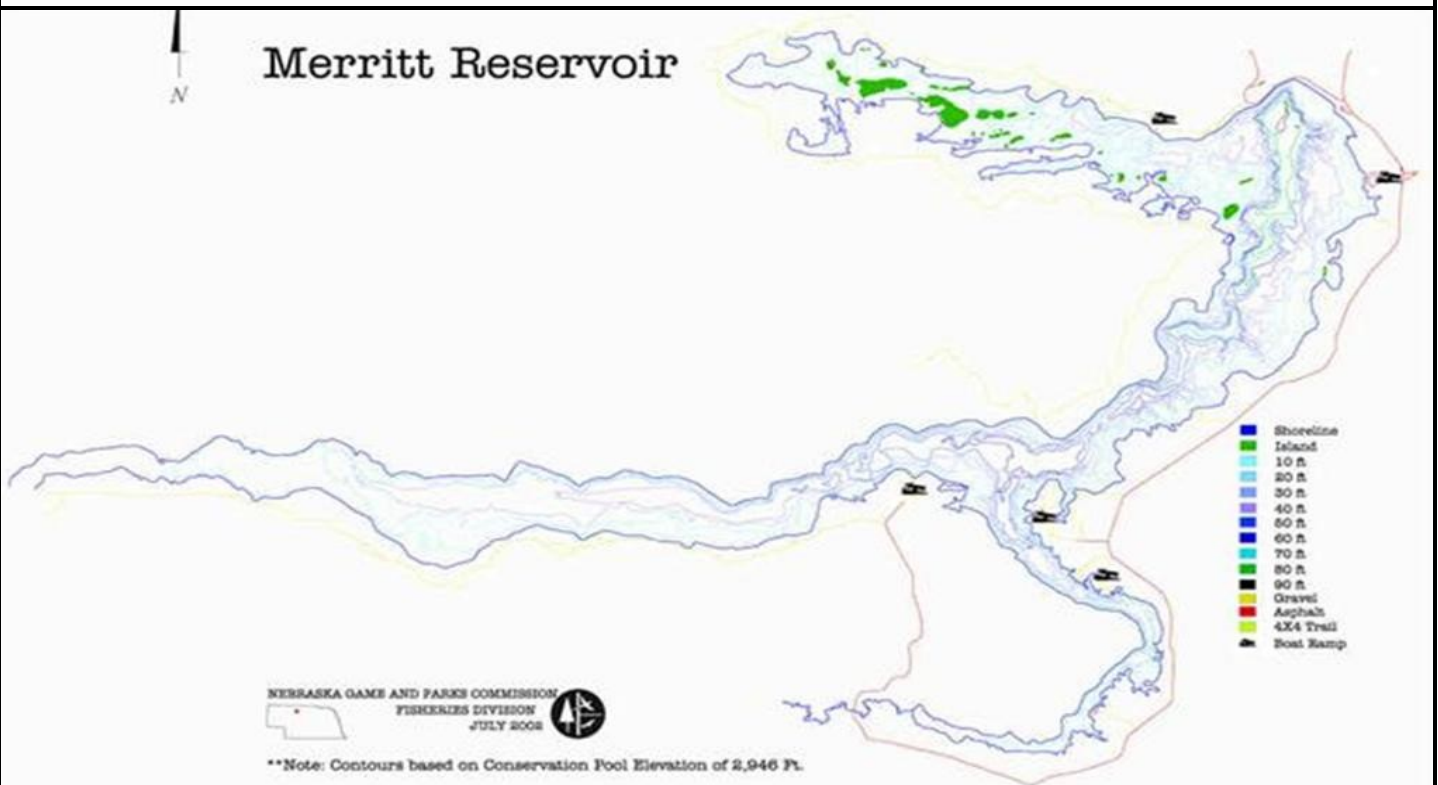
Fisheries Division will be conducting walleye spawn operations at Merritt Reservoir during 2011. These operations usually occur in late March or the first week of April and will last one or two weeks or until collection needs are met. Nets are usually set parallel to the dam or shore line in order to collect females coming in to spawn. During 2010 fishery personnel collected approximately 215 quarts of eggs from Merritt Reservoir. A graph showing historical egg collections can be seen to the right.

Walleye Egg Collection



Angler Creel Survey

A five year angler creel survey is being conducted at Merritt Reservoir. The study is being done in conjunction with the Nebraska Cooperative Fish and Wildlife Research Unit through the University of Nebraska at Lincoln. This survey will be run from April 1 until October 31 for the years 2009-2013. During this time, anglers are counted and interviewed on randomly selected days each month. Information gathered from this survey allows fisheries managers to look at estimates of angling pressure, size structure of fish caught, catch and harvest, and catch rates per hour.



For additional information about fisheries management at Merritt Reservoir please contact the following NGPC personnel by phone or email addresses listed below.

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